

ABSTRACT

It is disclosed a method of determining the exposure temperature of Al and Cr of a γ/γ' MCrAlY-coating after the use in a high temperature environment, the
5 γ/γ' MCrAlY-coating (6) exhibiting a non-equilibrium γ/γ' -microstructure at a temperature lower than the temperature during operation and the depletion of chromium from the γ/γ' -MCrAlY-coating (6) still allows the α -Cr phase to form. The coating conductivity and permeability by means of a multifrequency eddy current system is measured at different locations of the component and from
10 the measured conductivity and permeability the exposure temperature of said different locations of the components is determined.

15 (Fig. 1)